AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Listing of Claims:

1. (Original) In a receiver of a multicarrier wireless communications system, a method to perform channel estimation to suppress noise jitter over a bandwidth of interest, comprising:

transforming frequency domain channel estimates into the time domain;

suppressing noise jitter in the time domain channel estimates; and

transforming the noise suppressed time domain channel estimates back to the frequency domain for frequency domain equalization.

2. (Original) A method as in claim 1, where the channel estimation is based on minimum mean-squared error (MMSE) estimation over comb-type pilot signals.

3. (Original) A method as in claim 1, where the frequency domain channel estimates are transformed into the time domain channel estimates by use of an inverse fast Fourier transform (IFFT) function having a length of the number of pilots per symbol.

4. (Original) A method as in claim 1, where suppressing noise jitter comprises using a predefined threshold of actual power or accumulative power to minimize the noise jitter over the bandwidth.

5. (Original) A method as in claim 1, where suppressing noise jitter comprises using channel delay estimates made for frame synchronization purposes, preserving the channel estimates at actual tap delays and setting the others to zero.

6. (Currently Amended) A method as in claim 4, where suppressing noise jitter comprises preserving time-domain channel estimates with power larger than a predefined power threshold, and setting to zero those channel estimates with power less than the predefined power threshold as follows,

$$\tilde{h}(n) = \begin{cases} \hat{h}(n) & if \; \left|\hat{h}(n)\right|^2 > P_t \\ 0 & otherwise \end{cases},$$

where $|\;|$ <u>indicates</u> ~~implies~~ the absolute value, $P_t = pP_{all}$ is the power threshold, p is a weighting factor, and $P_{all} = \sum_{n=0}^{L_p - 1} \left|\hat{h}(n)\right|^2$ is the total power of the time domain channel estimates, <u>ĥ is a time domain transfer function that describes the channel estimates, h˜ is a time domain transfer function that describes the channel estimates with noise jitter removed, and n is an index in the time domain.</u>

7. (Original) A method as in claim 6, where in a time varying environment the power threshold is adapted based on noise and interference power.

8. (Currently Amended) A method as in claim 4, where suppressing noise jitter comprises ordering time-domain channel estimates as:

$$i_n = \text{ORDER}\left\{\left|\hat{h}(n)\right|^2\right\} \quad n = 0,1,2,\cdots,L_p - 1,$$

where ORDER{ } is a function to sort elements in ascending order and return an array of indices, further comprising accumulating the power of the time-domain channel estimates from largest to smallest, and setting a threshold on the accumulated power for zeroing the channel estimates outside of the threshold region in accordance with:

$$\tilde{h}(n) = \begin{cases} \hat{h}(i_n) & if \; \sum_{m=n}^{L_p - 1}\left|\hat{h}(i_m)\right|^2 < \rho P_{all}, \; n = L_p - 1,\cdots,0 \\ 0 & otherwise \end{cases},$$

where $|\;|$ <u>indicates the absolute value,</u> $90\% < \rho < 95\%$ is a percentage factor typically defined to be about one, <u>L_p is the number of pilot signals per symbol, P_{all} is the total power of the time-domain channel estimates, ĥ is a time domain transfer function that describes the channel estimates, h˜ is a time domain transfer function that describes the channel estimates with noise jitter removed, n</u>

is an index in the time domain, m is an index of ordered elements, and i_m and i_n represent an ordered element corresponding to a sorted channel estimate.

9. (Currently Amended) A method as in claim 5, where suppressing noise jitter comprises preserving those time domain channel estimates at actual channel tap delays and setting the remainder to zero by:

$$\tilde{h}(n) = \begin{cases} \hat{h}(n) & if \ \ n \in \Gamma, \ n = 0, \cdots, L_p - 1 \\ 0 & otherwise \end{cases},$$

where $\Gamma = \{\tau_l\} \ \ l = 1, \cdots, L$ is a vector of the tap delays, L_p is the number of pilot signals per symbol, $\hat{h}$ is a time domain transfer function that describes the channel estimates, $h^{\sim}$ is a time domain transfer function that describes the channel estimates with noise jitter removed, n is an index in the time domain, and i_n represents an ordered element corresponding to a sorted channel estimate.

10. (Original) A method as in claim 1, where the noise suppressed time domain channel estimates are transformed back to frequency domain for frequency domain equalization by a FFT operation having a length of the number of all subcarriers.

11. (Original) A method as in claim 1, where the channel estimation is based on a least squares estimation over comb-type pilot signals.

12. (Original) A receiver of a multicarrier wireless communications system, comprising:

a channel estimator;

a frequency equalizer; and

a channel estimation interpolation function to suppress noise jitter over a bandwidth of interest, comprising a unit to transform frequency domain channel estimates into the time domain; a unit to suppress the noise jitter in the time domain channel estimates and a unit to transform the noise suppressed time domain channel estimates back to the frequency domain for input to said

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frequency equalizer.

13. (Original) A receiver as in claim 12, where said channel estimator performs minimum mean-squared error (MMSE) estimation over comb-type pilot signals.

14. (Original) A receiver as in claim 12, where frequency domain channel estimates are transformed into the time domain channel estimates by use of an inverse fast Fourier transform (IFFT) function having a length of a number of pilots per symbol.

15. (Original) A receiver as in claim 12, where said channel estimation interpolation function uses a predefined threshold of actual power or accumulative power to minimize the noise jitter over the bandwidth.

16. (Original) A receiver as in claim 12, where said channel estimation interpolation function uses channel delay estimates made for frame synchronization purposes, and preserves channel estimates at actual tap delays and sets the others to zero.

17. (Currently Amended) A receiver as in claim 15, where said channel estimation interpolation function preserves time-domain channel estimates with power larger than a predefined power threshold, and sets to zero those channel estimates with power less than the predefined power threshold as follows,

$$\tilde{h}(n) = \begin{cases} \hat{h}(n) & if \: |\hat{h}(n)|^2 > P_t \\ 0 & otherwise \end{cases},$$

where $|\:|$ indicates ~~implies~~ the absolute value, $P_t = pP_{all}$ is the power threshold, p is a weighting factor, and $P_{all} = \sum_{n=0}^{L_p-1} |\hat{h}(n)|^2$ is the total power of the time domain channel estimates, $\hat{h}$ is a time domain transfer function that describes the channel estimates, $h^\sim$ is a time domain transfer function that describes the channel estimates with noise jitter removed, and n is an index in the time domain, m is an index of ordered elements.

18. (Original) A receiver as in claim 17, where in a time varying environment the power threshold is adapted based on noise and interference power.

19. (Currently Amended) A receiver as in claim 15, where said channel estimation interpolation function orders time-domain channel estimates as:

$$i_n = \text{ORDER}\left\{\left|\hat{h}(n)\right|^2\right\} \quad n = 0,1,2,\cdots,L_p - 1,$$

where ORDER{ } is a function to sort elements in ascending order and return an array of indices, and further comprises an accumulator to accumulate the power of the time-domain channel estimates from largest to smallest and sets a threshold on the accumulated power for zeroing the channel estimates outside of the threshold region in accordance with:

$$\tilde{h}(n) = \begin{cases} \hat{h}(i_n) & if \ \sum_{m=n}^{L_p-1}\left|\hat{h}(i_m)\right|^2 < \rho P_{all}, \ n = L_p - 1,\cdots,0 \\ 0 & otherwise \end{cases},$$

where $|\ |$ <u>indicates the absolute value,</u> $90\% < \rho < 95\%$ is a percentage factor typically defined to be about one, $\underline{L_p}$ <u>is the number of pilot signals per symbol,</u> $\underline{P_{all}}$ <u>is the total power of the time-domain channel estimates, ĥ is a time domain transfer function that describes the channel estimates, h⁻ is a time domain transfer function that describes the channel estimates with noise jitter removed, n is an index in the time domain, m is an index of ordered elements, and i_m and i_n represent an ordered element corresponding to a sorted channel estimate.</u>

20. (Currently Amended) A receiver as in claim 16, where said channel estimation interpolation function preserves time domain channel estimates at actual channel tap delays and sets the remainder to zero by:

$$\tilde{h}(n) = \begin{cases} \hat{h}(n) & if \ n \in \Gamma, \ n = 0,\cdots,L_p - 1 \\ 0 & otherwise \end{cases},$$

where $\Gamma = \{\tau_l\}$ $l = 1,\cdots,L$ is a vector of the tap delays.

where $|\ |$ <u>indicates the absolute value,</u> $90\% < \rho < 95\%$ is a percentage factor typically defined to be about one, $\underline{L_p}$ <u>is the number of pilot signals per symbol,</u> $\underline{P_{all}}$ <u>is the total power of the time-domain channel estimates, ĥ is a time domain transfer function that describes the channel estimates, h⁻ is</u>

<u>a time domain transfer function that describes the channel estimates with noise jitter removed, n</u> <u>is an index in the time domain, m is an index of ordered elements, and i_m and i_n represent an</u> <u>ordered element corresponding to a sorted channel estimate.</u>

21. (Original) A system as in claim 12, where the noise suppressed time domain channel estimates are transformed back to frequency domain for frequency domain equalization by a FFT operation having a length of the number of all subcarriers.

22. (Original) A system as in claim 12, where the channel estimation is based on a least squares estimation over comb-type pilot signals.

23. (Original) A receiver of an orthogonal frequency division multiplex (OFDM) multicarrier wireless communications system, comprising:

a channel estimator operable to perform estimation over received pilot signals to obtain channel estimates;

an equalizer operating in the frequency domain; and

a channel estimation interpolation function to suppress noise over a bandwidth of interest, comprising a unit to transform frequency domain channel estimates into the time domain; a unit to suppress the noise in the time domain channel estimates and a unit to transform the noise suppressed time domain channel estimates back to the frequency domain for input to said equalizer, where frequency domain channel estimates are transformed into the time domain channel estimates by use of an inverse fast Fourier transform (IFFT) function having a length of a number of pilots per OFDM symbol, and where the noise suppressed time domain channel estimates are transformed back to the frequency domain for frequency domain equalization by a FFT operation having a length of the number of all subcarriers.

24. (Original) A receiver as in claim 23, where said channel estimator is operable to perform one

of minimum mean-squared error (MMSE) or least squares estimation.

25. (Original) A receiver as in claim 23, where said channel estimation interpolation function uses a predefined threshold of actual power or accumulative power to minimize the noise over the bandwidth.

26. (Original) A receiver as in claim 22, where said channel estimation interpolation function uses channel delay estimates made for frame synchronization purposes, and preserves channel estimates at actual tap delays and sets the others to zero.

27. (Currently Amended) A receiver as in claim 25, where said channel estimation interpolation function preserves time-domain channel estimates with power larger than a predefined power threshold, and sets to zero those channel estimates with power less than the predefined power threshold as follows,

$$\tilde{h}(n) = \begin{cases} \hat{h}(n) & if \left|\hat{h}(n)\right|^2 > P_t \\ 0 & otherwise \end{cases},$$

where $|\ |$ indicates ~~implies~~ the absolute value, $P_t=pP_{all}$ is the power threshold, p is a weighting factor, and $P_{all} = \sum_{n=0}^{L_g-1} \left|\hat{h}(n)\right|^2$ is the total power of the time domain channel estimates, <u>ĥ is a time domain transfer function that describes the channel estimates, h~ is a time domain transfer function that describes the channel estimates with noise jitter removed, and n is an index in the time domain.</u>

28. (Original) A receiver as in claim 27, where in a time varying environment the power threshold is adapted based on noise and interference power.

29. (Currently Amended) A receiver as in claim 25, where said channel estimation interpolation function orders time-domain channel estimates as:

$$i_n = ORDER\left\{\left|\hat{h}(n)\right|^2\right\} \quad n = 0,1,2,\cdots,L_P-1,$$

where ORDER{ } is a function to sort elements in ascending order and return an array of indices, and further comprises an accumulator to accumulate the power of the time-domain channel estimates from largest to smallest and sets a threshold on the accumulated power for zeroing the channel estimates outside of the threshold region in accordance with:

$$\tilde{h}(n) = \begin{cases} \hat{h}(i_n) & \text{if } \sum_{m=n}^{L_p-1} \left|\hat{h}(i_m)\right|^2 < \rho P_{all}, \ n = L_p - 1, \cdots, 0 \\ 0 & \text{otherwise} \end{cases},$$

where $90\% < \rho < 95\%$ is a percentage factor typically defined to be about one.

where $|\ |$ indicates the absolute value, $90\% < \rho < 95\%$ is a percentage factor typically defined to be about one, L_p is the number of pilot signals per symbol, P_{all} is the total power of the time-domain channel estimates, $\hat{h}$ is a time domain transfer function that describes the channel estimates, $\tilde{h}$ is a time domain transfer function that describes the channel estimates with noise jitter removed, n is an index in the time domain, m is an index of ordered elements, and i_m and i_n represent an ordered element corresponding to a sorted channel estimate.

30. (Currently Amended) A receiver as in claim 26, where said channel estimation interpolation function preserves time domain channel estimates at actual channel tap delays and sets the remainder to zero by:

$$\tilde{h}(n) = \begin{cases} \hat{h}(n) & \text{if } n \in \Gamma, \ n = 0, \cdots, L_p - 1 \\ 0 & \text{otherwise} \end{cases},$$

where $\Gamma = \{\tau_l\}$ $l = 1, \cdots, L$ is a vector of the tap delays, L_p is the number of pilot signals per symbol, $\hat{h}$ is a time domain transfer function that describes the channel estimates, $\tilde{h}$ is a time domain transfer function that describes the channel estimates with noise jitter removed, n is an index in the time domain, and i_n represents an ordered element corresponding to a sorted channel estimate.

31. (Original) A receiver as in claim 23, where said received pilot signals comprise comb-type pilot signals.

32. (Original) A receiver as in claim 23, embodied in a cellular telephone device.

33. (Previously Presented) A receiver of an orthogonal frequency division multiplex (OFDM) multicarrier wireless communications system, comprising:

channel estimator means for performing estimation over received pilot signals to obtain channel estimates;

equalizer means for operation in the frequency domain; and

channel estimation interpolation means for suppressing noise over a bandwidth of interest, comprising means for transforming frequency domain channel estimates into the time domain; means for suppressing the noise in the time domain channel estimates and means for transforming the noise suppressed time domain channel estimates back to the frequency domain for input to said equalizer means, where frequency domain channel estimates are transformed into the time domain channel estimates by use of an inverse fast Fourier transform (IFFT) function having a length of a number of pilots per OFDM symbol, and where the noise suppressed time domain channel estimates are transformed back to the frequency domain for frequency domain equalization by a FFT operation having a length of the number of all subcarriers.

34. (Currently Amended) A receiver as in claim 33, where said channel estimation interpolation means preserves time-domain channel estimates with power larger than a predefined power threshold, and sets to zero those channel estimates with power less than the predefined power threshold as follows,

$$\tilde{h}(n) = \begin{cases} \hat{h}(n) & if \left|\hat{h}(n)\right|^2 > P_t \\ 0 & otherwise \end{cases},$$

where $|\ |$ indicates ~~implies~~ the absolute value, $P_t = pP_{all}$ is the power threshold, p is a weighting factor, and $P_{all} = \sum_{n=0}^{L_g-1} \left|\hat{h}(n)\right|^2$ is the total power of the time domain channel estimates, $\hat{h}$ is a time

domain transfer function that describes the channel estimates, $\tilde{h}$ is a time domain transfer function that describes the channel estimates with noise jitter removed, and n is an index in the

time domain.

35. (Currently Amended) A receiver as in claim 33, where said channel estimation interpolation means orders time-domain channel estimates as:

$$i_n = \text{ORDER}\left\{\left|\hat{h}(n)\right|^2\right\} \quad n = 0,1,2,\cdots,L_p - 1,$$

where ORDER{ } is a function to sort elements in ascending order and return an array of indices, and further comprises accumulator means for accumulating the power of the time-domain channel estimates from largest to smallest and means for setting a threshold on the accumulated power for zeroing the channel estimates outside of the threshold region in accordance with:

$$\tilde{h}(n) = \begin{cases} \hat{h}(i_n) & if \quad \sum_{m=n}^{L_p-1}\left|\hat{h}(i_m)\right|^2 < \rho P_{all}, \; n = L_p - 1,\cdots,0 \\ 0 & otherwise \end{cases},$$

where $|\ |$ indicates the absolute value, $90\% < \rho < 95\%$ is a percentage factor typically defined to be about one, L_p is the number of pilot signals per symbol, P_{all} is the total power of the time-domain channel estimates, $\hat{h}$ is a time domain transfer function that describes the channel estimates, $h^\sim$ is a time domain transfer function that describes the channel estimates with noise jitter removed, n is an index in the time domain, m is an index of ordered elements, and i_m and i_n represent an ordered element corresponding to a sorted channel estimate.

36. (Currently Amended) A receiver as in claim 33, where said channel estimation interpolation means preserves time domain channel estimates at actual channel tap delays and sets the remainder to zero by:

$$\tilde{h}(n) = \begin{cases} \hat{h}(n) & if \quad n \in \Gamma, \; n = 0,\cdots,L_p - 1 \\ 0 & otherwise \end{cases},$$

where $\Gamma = \{\tau_l\} \quad l = 1,\cdots,L$ is a vector of the tap delays.

where $|\ |$ indicates the absolute value, $90\% < \rho < 95\%$ is a percentage factor typically defined to be about one, L_p is the number of pilot signals per symbol, P_{all} is the total power of the time-domain channel estimates, $\hat{h}$ is a time domain transfer function that describes the channel estimates, $h^\sim$ is a time domain transfer function that describes the channel estimates with noise jitter removed, n

is an index in the time domain, m is an index of ordered elements, and i_m and i_n represent an ordered element corresponding to a sorted channel estimate.

37. (Currently Amended) <u>A computer readable medium encoded with a computer program</u> ~~A computer program product embodied on a computer readable medium~~ for directing a computer to operate with a receiver of a multicarrier wireless communications system for performing channel estimation to suppress noise jitter over a bandwidth of interest, comprising operations of:

transforming frequency domain channel estimates into the time domain;

suppressing noise jitter in the time domain channel estimates; and

transforming the noise suppressed time domain channel estimates back to the frequency domain for frequency domain equalization.

38. (Currently Amended) <u>A computer readable medium encoded with a computer program</u> ~~A computer program product embodied on a computer readable medium~~ as in claim 37, where the channel estimation is based on minimum mean-squared error (MMSE) estimation over comb-type pilot signals.

39. (Currently Amended) <u>A computer readable medium encoded with a computer program</u> ~~A computer program product embodied on a computer readable medium~~ as in claim 37, where the frequency domain channel estimates are transformed into the time domain channel estimates by use of an inverse fast Fourier transform (IFFT) function having a length of the number of pilots per symbol.

40. (Currently Amended) <u>A computer readable medium encoded with a computer program</u> ~~A computer program product embodied on a computer readable medium~~ as in claim 37, where suppressing noise jitter comprises using a predefined threshold of actual power or accumulative power to minimize the noise jitter over the bandwidth.

41. (Currently Amended) <u>A computer readable medium encoded with a computer program</u> A ~~computer program product embodied on a computer readable medium~~ as in claim 37, where suppressing noise jitter comprises using channel delay estimates made for frame synchronization purposes, preserving the channel estimates at actual tap delays and setting the others to zero.

42. (Currently Amended) <u>A computer readable medium encoded with a computer program</u> A ~~computer program product embodied on a computer readable medium~~ as in claim 40, where suppressing noise jitter comprises preserving time-domain channel estimates with power larger than a predefined power threshold, and setting to zero those channel estimates with power less than the predefined power threshold as follows,

$$\tilde{h}(n) = \begin{cases} \hat{h}(n) & if \left|\hat{h}(n)\right|^2 > P_t \\ 0 & otherwise \end{cases},$$

where $|\ |$ <u>indicates</u> ~~implies~~ the absolute value, $P_t = pP_{all}$ is the power threshold, p is a weighting factor, and $P_{all} = \sum_{n=0}^{L_p-1} \left|\hat{h}(n)\right|^2$ is the total power of the time domain channel estimates, <u>ĥ is a time domain transfer function that describes the channel estimates, h˜ is a time domain transfer function that describes the channel estimates with noise jitter removed, and n is an index in the time domain.</u>

43. (Currently Amended) <u>A computer readable medium encoded with a computer program</u> A ~~computer program product embodied on a computer readable medium~~ as in claim 42, where in a time varying environment the power threshold is adapted based on noise and interference power.

44. (Currently Amended) <u>A computer readable medium encoded with a computer program</u> A ~~computer program product embodied on a computer readable medium~~ as in claim 40, where suppressing noise jitter comprises ordering time-domain channel estimates as:

$$i_n = ORDER\left\{\left|\hat{h}(n)\right|^2\right\} \quad n = 0,1,2,\cdots,L_p - 1,$$

where ORDER{ } is a function to sort elements in ascending order and return an array of indices,

further comprising accumulating the power of the time-domain channel estimates from largest to smallest, and setting a threshold on the accumulated power for zeroing the channel estimates outside of the threshold region in accordance with:

$$\tilde{h}(n) = \begin{cases} \hat{h}(i_n) & if \;\; \sum_{m=n}^{L_p-1} \left| \hat{h}(i_m) \right|^2 < \rho P_{all}, \;\; n = L_p - 1, \cdots, 0 \\ 0 & otherwise \end{cases},$$

where $|\;|$ indicates the absolute value, $90\% < \rho < 95\%$ is a percentage factor typically defined to be about one, L_p is the number of pilot signals per symbol, P_{all} is the total power of the time-domain channel estimates, $\hat{h}$ is a time domain transfer function that describes the channel estimates, $\tilde{h}$ is a time domain transfer function that describes the channel estimates with noise jitter removed, n is an index in the time domain, m is an index of ordered elements, and i_m and i_n represent an ordered element corresponding to a sorted channel estimate.

45. (Currently Amended) A computer readable medium encoded with a computer program ~~A computer program product embodied on a computer readable medium~~ as in claim 41, where suppressing noise jitter comprises preserving those time domain channel estimates at actual channel tap delays and setting the remainder to zero by:

$$\tilde{h}(n) = \begin{cases} \hat{h}(n) & if \;\; n \in \Gamma, \;\; n = 0, \cdots, L_p - 1 \\ 0 & otherwise \end{cases},$$

where $\Gamma = \{\tau_l\}$ $l = 1, \cdots, L$ is a vector of the tap delays, L_p is the number of pilot signals per symbol, $\hat{h}$ is a time domain transfer function that describes the channel estimates, $\tilde{h}$ is a time domain transfer function that describes the channel estimates with noise jitter removed, n is an index in the time domain, and i_n represents an ordered element corresponding to a sorted channel estimate.

46. (Currently Amended) A computer readable medium encoded with a computer program ~~A computer program product embodied on a computer readable medium~~ as in claim 37, where the noise suppressed time domain channel estimates are transformed back to frequency domain for frequency domain equalization by a FFT operation having a length of the number of all subcarriers.

47. (Currently Amended) <u>A computer readable medium encoded with a computer program</u> A computer program product embodied on a computer readable medium as in claim 37, where the channel estimation is based on a least squares estimation over comb-type pilot signals.

48. (Currently Amended) <u>A computer readable medium encoded with a computer program</u> A computer program product embodied on a computer readable medium as in claim 37, embodied in a wireless communications terminal.

49. (New) A circuit comprising:

a channel estimator;

a frequency equalizer; and

a channel estimation interpolation function to suppress noise jitter over a bandwidth of interest, comprising a unit to transform frequency domain channel estimates into the time domain; a unit to suppress the noise jitter in the time domain channel estimates and a unit to transform the noise suppressed time domain channel estimates back to the frequency domain for input to said frequency equalizer.

50. (New) A circuit as in claim 49, where said channel estimation interpolation function uses a predefined threshold of actual power to minimize the noise jitter over the bandwidth.

51. (New) A circuit as in claim 49, where said channel estimation interpolation function uses a predefined threshold of accumulative power to minimize the noise jitter over the bandwidth.

52. (New) A circuit as in claim 49, where said channel estimation interpolation function uses channel delay estimates made for frame synchronization purposes, and preserves channel estimates at actual tap delays and sets the others to zero.

53. (New) A mobile user device, comprising:

a receiver, comprising:

a channel estimator;

a frequency equalizer; and

a channel estimation interpolation function to suppress noise jitter over a bandwidth of interest, comprising a unit to transform frequency domain channel estimates into the time domain; a unit to suppress the noise jitter in the time domain channel estimates and a unit to transform the noise suppressed time domain channel estimates back to the frequency domain for input to said frequency equalizer.

54. (New) A mobile user device as in claim 53, where said channel estimation interpolation function uses a predefined threshold of actual power to minimize the noise jitter over the bandwidth.

55. (New) A mobile user device as in claim 53, where said channel estimation interpolation function uses a predefined threshold of accumulative power to minimize the noise jitter over the bandwidth.

56. (New) A mobile user device as in claim 53, where said channel estimation interpolation function uses channel delay estimates made for frame synchronization purposes, and preserves channel estimates at actual tap delays and sets the others to zero.